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VIA ELECTRONIC FILING

The Honorable Jocelyn G. Boyd
Chief Clerk/Executive Director
Public Service Commission of South Carolina
101 Executive Center Drive, Suite 100
Columbia, SC 29210

**Re: Annual Review of Base Rates for Fuel Costs of Duke Energy Carolinas, LLC,
Increasing Residential and Non-Residential Rates
Docket Number: 2021-3-E**

Updated DER Incentive Calculations

Dear Ms. Boyd:

On September 30, 2021, the Public Service Commission of South Carolina (the "Commission") issued Order No. 2021-668, which directed that "within thirty (30) days of the issuance of this Order, DEC shall recalculate the DER incentive and other components which may have changed as a result of Order No. 2021-569, issued in the generic docket regarding NEM (Docket No. 2019-182-E), file its calculations with the Commission and provide its recalculations to the parties in this docket."

Pursuant to the Commission's instructions, Duke Energy Carolinas, LLC has attached its recalculations of the DER incentives and other components that changed as a result of Commission Order No. 2021-569. Commission Order No. 2021-569 impacted the components for both the 2020 and 2021 DER incentive, so two tables have been provided reflecting those changes.

By copy of this letter, I am serving all parties of record via electronic mail.

Sincerely,

Katie M. Brown

Enclosure

cc: Parties of record

Duke Energy Carolinas, LLC Value of Net Energy Metering (“NEM”) Distributed Energy Resource, by Component

In Order 2021-688, the PSCSC ordered Duke Energy Carolinas, LLC (“DEC”) to recalculate the DER incentive and other components which may have changed as a result of Order No. 2021-569, issued in the generic docket regarding NEM (Docket No. 2019-182-E). The recalculation of the impacted components for DEC are captured in Table 5 of Witness Jason Martin’s testimony referencing the Value of DER. The tables for 2020 and 2021 provide the recalculated values for each component.

Table 5 for DEC 2020 with recalculated values from Order 2021-569

Components of NEM Distributed Energy Resource Value	Component Value (\$/kWh) Residential PV ¹	Component Value (\$/kWh) SGS PV ¹	Component Value (\$/kWh) Large PV ¹
Marginal Energy Cost	\$0.02911	\$0.02915	\$0.02914
Marginal Capacity Cost	\$0.00436	\$0.00441	\$0.00441
Ancillary Services	(\$0.00110)	(\$0.00110)	(\$0.00110)
Transmission and Distribution ("T&D") Capacity	\$0.00000	\$0.00000	\$0.00000
Avoided Criteria Pollutants ²	\$0.00005	\$0.00005	\$0.00004
Avoided CO2 Emission Cost (currently zero)	\$0.00000	\$0.00000	\$0.00000
Fuel Hedge ³	\$0.00000	\$0.00000	\$0.00000
Utility Integration & Interconnection Costs	\$0.00000	\$0.00000	\$0.00000
Utility Administration Costs	\$0.00000	\$0.00000	\$0.00000
Environmental Costs	\$0.00000	\$0.00000	\$0.00000
Subtotal	\$0.03242	\$0.03250	\$0.03250
Line Losses ⁴	\$0.00081	\$0.00082	\$0.00082
Total Value NEM Distributed Energy Resource	\$0.03323	\$0.03332	\$0.03332

1 “Residential PV” refers to a load shape reflecting generation installed by a residential customer. “SGS PV” refers to a load shape reflecting generation installed by a small commercial/industrial customer served under Small General Service Schedule SGS. “Large PV” refers to a load shape reflecting generation installed by a customer with higher consumption requirements and applies to all other nonresidential schedules. For the first time, the Company has separated the values for residential customers (“Residential PV”) and small commercial/industrial customers (“SGS PV”) as a result of available actual metered solar load profile data for the residential class. The Company continues to utilize third-party solar load profile data for non-residential customers.

2 Avoided Criteria Pollutants reflects NOx and SOx that have been separately identified from approved marginal energy costs.

3 Pursuant to the Settlement Agreement reached in DEC’s 2016 annual fuel proceeding (Docket No. 2016-3-E), the Company has calculated the hedge value and determined that no fuel hedge exists; therefore, the value is zero.

4 Line loss factors are 2.332% for on-peak marginal energy, 4.433% for off-peak marginal energy and 1.874% for marginal capacity per DEC’s updated 2018 line loss analysis based upon 2018 cost of service.

Table 5 for DEC 2021 with recalculated values from Order 2021-569

Components of NEM Distributed Energy Resource Value	Component Value (\$/kWh) Residential PV¹	Component Value (\$/kWh) SGS PV¹	Component Value (\$/kWh) Large PV¹
Marginal Energy Cost	\$0.02876	\$0.02879	\$0.02879
Marginal Capacity Cost	\$0.00435	\$0.00439	\$0.00439
Ancillary Services	(\$0.00050)	(\$0.00049)	(\$0.00007)
Transmission and Distribution ("T&D") Capacity	\$0.00000	\$0.00000	\$0.00000
Avoided Criteria Pollutants ²	\$0.00004	\$0.00004	\$0.00004
Avoided CO2 Emission Cost (currently zero)	\$0.00000	\$0.00000	\$0.00000
Fuel Hedge ³	\$0.00000	\$0.00000	\$0.00000
Utility Integration & Interconnection Costs	\$0.00000	\$0.00000	\$0.00000
Utility Administration Costs	\$0.00000	\$0.00000	\$0.00000
Environmental Costs	\$0.00000	\$0.00000	\$0.00000
Subtotal	\$0.03265	\$0.03273	\$0.03316
Line Losses ⁴	\$0.00080	\$0.00080	\$0.00080
Total Value NEM Distributed Energy Resource	\$0.03345	\$0.03353	\$0.03396

1 "Residential PV" refers to a load shape reflecting generation installed by a residential customer. "SGS PV" refers to a load shape reflecting generation installed by a small commercial/industrial customer served under Small General Service Schedule SGS. "Large PV" refers to a load shape reflecting generation installed by a customer with higher consumption requirements and applies to all other nonresidential schedules. For the first time, the Company has separated the values for residential customers ("Residential PV") and small commercial/industrial customers ("SGS PV") as a result of available actual metered solar load profile data for the residential class. The Company continues to utilize third-party solar load profile data for non-residential customers.

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3 Pursuant to the Settlement Agreement reached in DEC's 2016 annual fuel proceeding (Docket No. 2016-3-E), the Company has calculated the hedge value and determined that no fuel hedge exists; therefore, the value is zero.

4 Line loss factors are 2.332% for on-peak marginal energy, 4.433% for off-peak marginal energy and 1.874% for marginal capacity per DEC's updated 2020 line loss analysis based upon 2020 cost of service.

A comparison of resulting total values of NEM Distributed Energy Resources as originally filed in this docket to the recalculated values as required in Order No. 2021-668 is provided in the table below.

Total Value of NEM Distributed Energy Resource Value	Component Value (\$/kWh) Residential PV	Component Value (\$/kWh) SGS PV	Component Value (\$/kWh) Large PV
2020 Filed	\$0.02868	\$0.02871	\$0.02871
2020 Recalculated	\$0.03323	\$0.03332	\$0.03332
2021 Filed	\$0.02891	\$0.02895	\$0.02937
2021 Recalculated	\$0.03345	\$0.03353	\$0.03396

The difference in the values will be included in the 2022 DEC fuel filing as applicable.